

NORTON SOUND HERRING SPAWN-ON-KELP POUND FISHERY

1998 MANAGEMENT PLAN



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TABLE OF CONTENTS

	<u>Page</u>
LIST OF FIGURES	ii
INTRODUCTION	1
CALENDAR OF EVENTS	1
REGULATIONS	2
HERRING STOCK STATUS AND GUIDELINE HARVEST LEVEL	3
PERMIT APPLICATION PROCEDURES.....	4
PERMIT REQUIREMENTS.....	5
HARVEST OF KELP	6
ALLOCATION OF KELP.....	6
HARVEST AND PRODUCTION.....	7
FISHERY CONDUCT AND MANAGEMENT.....	7
REQUIREMENTS FOR BUYERS.....	8
LICENSE REQUIREMENTS	8
OTHER AGENCY REQUIREMENTS.....	9
LIST OF MANAGEMENT CONTACTS.....	11

LIST OF FIGURES

	<u>Page</u>
Figure 1. Spawn-on-Kelp boundary area for herring pound structures.	10

INTRODUCTION

This plan provides an overview of the management approach, permit requirements, and regulations for the 1998 Norton Sound Spawn-On-Kelp Pound Fishery. This is an open pound fishery, enclosures are not allowed. An open pound fishery involves suspending kelp from a floating structure in an area where herring are spawning. The herring are not handled or captured, and the kelp with eggs is removed from the water and then sold. The structures need to be removed from the water after the fishery closes.

The Board of Fisheries has allowed a one year only experimental fishery in Subdistrict 5 to evaluate the potential of a spawn on kelp fishery in Norton Sound utilizing imported kelp. The fishery will be managed to allow some flexibility to the participants so that various pounding strategies may be tested. The management staff will be investigating spawn intensity, coverage, weight ratios (kelp:spawn), and associated egg mortality. Participants and staff are expected to report to the Board on the success of the fishery during the next winter.

Spawn on kelp fisheries were conducted in Norton Sound from 1978 to 1984. Most of the harvests were of Fucus sp. (the wild pop weed of Norton Sound) in Subdistrict 1. However during the 1984 season a single permittee operated an open pound using imported Macrocystis sp. Kelp (a large bladed kelp found in Southeast Alaska) in Subdistrict 5. He successfully harvested herring spawn on Macrocystis sp. product and thereby proved the potential of such a fishery.

Department biologists listed at the end of this document are available to answer questions concerning this management plan. Pound fishery participants are also encouraged to carefully review the section of this plan containing requirements of other agencies.

CALENDAR OF EVENTS

The following is a calendar of events to be considered by pound operators for the 1998 fishing season.

- April 1 - Department of Fish and Game pound permit applications will made available.
- April 16 - 1998 Management Plan is available and mailed to applicants.
- April 16 - Deadline for submitting an application to the Department of Fish and Game for a pound permit.

- April 24 - The department will issue a permit to each qualified applicant that has met the April 16 deadline. Kelp allocations will be made for each pound operator who has informed the department of their intent to operate an open pound.
- May 18 to June 5 - Permit holders may deploy kelp once they have notified the department of the placement of their pounds.
- June 1 to June 19 - The department will announce when pounds must be completely removed from the water.

REGULATIONS

The Alaska Board of Fisheries has approved the following regulations creating the Norton Sound pound fishery:

ARTICLE 14. STATISTICAL AREA Q – BERING SEA-KOTZEBUE AREA.

5 AAC 27 is amended by adding a new section to read:

5 AAC 27.934. MANAGEMENT PLAN FOR HERRING SPAWN-ON-KELP IN POUNDS. (a) This plan establishes criteria for the operation of herring pounds in the Norton Sound District.

(b) Herring spawn-on-kelp may only be taken under the authority of a permit issued by the Commissioner or the Commissioner's designee and will be issued to an applicant who holds a valid Norton Sound herring gillnet or beach seine limited entry permit or interim use permit.

(c) The operator of a pound to take herring spawn-on-kelp shall apply for a permit issued by the Commissioner or the Commissioner's designee, before April 16 of each calendar year;

(1) a person registered as a herring pound operator may not operate a gillnet or beach seine in the Norton Sound herring sac roe fishery;

(2) only one permit holder may use a pound at a time;

(3) a person must hold a valid Norton Sound gillnet or beach seine herring limited entry permit or interim use permit to operate a herring pound.

(d) The herring allocation for the herring pound fishery shall be no more than 320 tons of sac roe herring (four percent of the total annual herring sac roe harvest projection of 8,138 tons as published by the department for the Norton Sound District); the herring pound harvest allocation shall be deducted from the total annual herring sac roe harvest projection before the determination of the beach seine harvest allocation specified in 5 AAC 27.960.

(e) The herring spawn-on-kelp guideline harvest level shall be no more than 90 tons (the amount of herring spawn-on-kelp product expected to be produced by the herring pound allocation of 320 tons of herring assuming a herring to spawn-on-kelp ratio of 25 percent); the

herring spawn-on-kelp guideline harvest level includes the combined weight of herring eggs and kelp.

(f) The department shall manage the pound fishery to achieve the spawn-on-kelp guideline harvest level by restricting the number of blades of kelp a person may place in a pound as follows:

(1) no more than 75,000 blades of kelp may be allowed in the herring pound fishery (the number of blades of kelp expected to achieve the herring spawn-on-kelp guideline harvest level of 90 tons);

(2) the maximum number of blades of kelp a person may place in a pound is 2,000 (equivalent to the average herring harvest expected in the fishery as determined by dividing the herring guideline harvest level by the total number of CFEC permit and interim use permits in the fishery);

(3) if more than 37 permits are issued for the fishery, the department shall determine the number of blades of kelp a person may place in the water by equally dividing the total number of blades of kelp allowed among the permit holders.

(g) Fishing commences when kelp is placed in the pound in the water.

(h) Before a person places kelp in the water, a person must plainly and legibly mark their name and five digit CFEC number in a conspicuous place on the herring pound; after fishing commences and until the season closes, the five digit CFEC number marked on a pound may not change.

(i) The holder of the herring pound permit must be present when kelp is placed in the pound and when kelp is harvested from the pound.

(j) A herring pound permit holder shall weigh the spawn-on-kelp when it is removed from the pound.

(k) The Commissioner may specify other operational criteria determined that the Commissioner determines to be necessary for the conservation and management of herring and kelp, and the orderly prosecution of the fishery.

(l) For the purposes of this section, "a herring pound" is a structure or a means of suspending kelp in the water to provide spawning substrate for herring to be harvested as spawn-on-kelp, this form of herring pound has no enclosure.

(m) The provisions of this section do not apply after December 31, 1998.

HERRING STOCK STATUS AND GUIDELINE HARVEST LEVEL

Historically, the Norton Sound herring stock size has been approximately 20,000-40,000 tons of spawning biomass (Table 1). The 1998 projected biomass is on the upper end of that range at 40,688 tons. During most years, several thousand tons of spawning herring move through Subdistrict 5 and deposit up to three miles of spawn. Often the herring passing through this subdistrict are bound for spawning locations to the west. It is unknown how herring will respond to

the imported Macrocystis sp. kelp.

Herring spawn typically occurs in Norton Sound between the last week in May and the first week in June. The earliest recorded spawn occurred on May 15, 1983, and the latest recorded spawn was on June 29, 1992. During the 1997 season, spawning occurred from May 19 through May 31. The majority of spawn occurs on the Fucus sp. beds of southern Norton Sound, although herring do spawn on eel grass and even bare rock along the north shore of Norton Sound. Typically, spawn occurs first in Subdistrict 1 and five days or so later in the Subdistrict 5. Occasionally, when water temperatures are warm along the northern coast, spawn will occur first in Norton Bay. Spawning is thought to be opportunistic and to target suitable plant substrate that does not have spawn which is more than 24 hours old on it already.

PERMIT APPLICATION PROCEDURES

Permit applications are available beginning April 1, 1998 at the Nome Fish and Game Area Office, and they can be obtained by writing the Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Pouch 1148, Nome, Alaska 99762. To establish eligibility for the 1998 pound fishery, an operator must submit a permit application to the Nome Fish and Game office by April 16, 1998. Applications sent by mail must be postmarked no later than April 15. Applications received after this date will not be permitted. Original applications are required.

On approximately April 24, the department will issue a permit to each eligible applicant. The permit will specify conditions that will be required of each pound operator. Permits will be issued for open pounds only, and once a permit holder has chosen to be a spawn on kelp operator they will have to operate that gear type for the remainder of the season, they may not participate in the gillnet or beach seine fisheries.

PERMIT REQUIREMENTS

Existing regulations require the department to establish permit stipulations for management of the Norton Sound pound fishery. The following stipulations will be specified on each permit:

1. A herring spawn-on-kelp open and closed pounds are now defined in regulation (see under REGULATIONS). Since these pounds must be adequate to support spawn-on-kelp the pound will be declared ineligible, if 150 pounds of weight placed on any side of the pound submerges a side of the structure.
2. Each pound must be identified by an upright sign in a conspicuous place with the permittee's full name and the number which is assigned by the department on the first page of the permit. Letters and numbers must be at least six inches high and consist of lines at least one-half inch wide that contrast with the background. Pound numbers of the same size must also be permanently affixed to the top surface of the pound structure where they will be visible from the air.
3. Pound operators will not be required to have a structure in the water until the introduction of kelp. Operators must inform the department by April 16 of their intent to use an open pound. Open pounds must be clearly identified as stated above. Kelp storage areas must also be declared by the operators either before the kelp is deployed in a pound or to hold excess kelp after the pounds are deployed. Once spawning is determined to be imminent, excess kelp will be removed from the spawning area.
4. Permit holders may locate their pound only in Subdistrict 5, west of a line from the Kwiniuk River mouth and east of a line from the southern tip of Cape Darby (Figure 1).
5. Each permit holder must be physically present at the fishing site during times when kelp is being placed in the pound, during times when the pound structure with kelp suspended is being moved to another location, and during the collection and sale of herring spawn-on-kelp product.
6. All lines of kelp must be plainly and legibly marked above the water surface with the number of kelp blades on that line. This permit stipulation was requested by Fish and Wildlife Protection to help ensure that kelp blade allocations are not exceeded (Duct tape numbered with waterproof ink will satisfy this requirement).

7. After harvesting their product or when discontinuing operation, all fishermen must first contact the department before leaving the fishing grounds and hail the approximate amount of herring spawn-on-kelp harvested from their pound.
8. Each permit holder's spawn-on-kelp product must remain separate from other permit holders product until after processing.
9. The permit must be in the possession of the pound operator at all times.
10. The pound structure must be completely removed from the water by a date set by field announcement no later than June 19, 1998.

HARVEST OF KELP

During the 1998 Norton Sound herring sac roe season, a sac roe CFEC permit (either gillnet or beach seine) is required to harvest spawn on kelp. Kelp harvest permits will also be required and may be obtained from the Nome department office. Based on results from fisheries in Southeastern Alaska and Prince William Sound, roughly 200 pounds of kelp is needed to produce one ton of spawn-on-kelp. This assumes that weight gains of ten times are occurring from the weight of kelp to the weight of spawn-on-kelp product harvested. Kelp blades will be allocated equally among the participating fishermen.

ALLOCATION OF KELP

Pound operators are advised that kelp allocations of up to 2000 blades are possible during the 1998 season based on a harvest objective of 90 tons of spawn-on-kelp product and the Board of Fisheries requirement that the amount of roe harvested by each operator be kept to roughly the same amounts harvested by the average sac roe fisher. Actual kelp allocations will depend on the number of operators who have registered by April 16, and will not be announced until around April 24.

Notification of the kelp allocations will be announced by news release.

HARVEST AND PRODUCTION

Each permit holder's spawn-on-kelp blades must remain separate from other permit holder's spawn-on-kelp blades until after processing. Permit holders will be allowed to harvest all the product produced in their pounds. A permit holder's fish ticket must report only the spawn-on-kelp harvested from his/her own pound. All fishermen and any vessel carrying spawn-on-kelp product must first contact the department and hail the estimated amount of spawn-on-kelp harvested before leaving the fishing grounds.

FISHERY CONDUCT AND MANAGEMENT

Suitable sites for pounds in Subdistrict 5 of Norton Sound are limited. To avoid herring mortality and damage to the pounds, operators should locate their pounds in an area with minimal exposure to wind and wave action, and with a relatively deep bottom.

The department will station a manager and open boat in the subdistrict when herring are spawning. After that time, department personnel will closely monitor all phases of the fishery to assure compliance with permit conditions. All fishery announcements, including updates of herring activities and fishery openings/closures, will be broadcast by VHF radio, Channel 7. Fishermen are strongly encouraged to have a VHF radio.

The department will be closely monitoring herring activity in Norton Sound by vessel and aerial surveys. If it appears spawning will occur earlier or later than usual, the fishery's opening and closing dates will be adjusted appropriately.

The department will regulate the fishery by setting and enforcing a strict limitation on the number of kelp blades that can be put in each permit holder's pound. If a permit holder wishes to store excess kelp early in the season prior to spawning they must make arrangements with Department

staff on how to separate and mark the excess kelp. Staff will designate a storage area well away from shore to hold kelp in excess of the pound limits.

REQUIREMENTS FOR BUYERS

The buyer or his agent shall report to the Unalakleet office upon arrival in Norton Sound to file district registration forms as specified in 5AAC 27.970.

Operators of floating processing vessels will be required to report in person, by VHF radio, or by telephone, to the Department of Fish and Game office in Unalakleet before the start of processing operations in Norton Sound. These reporting requirements are specified by regulation 5 AAC 39.130 (f).

Fish tickets must be submitted to the department within three days after the closure of the fishery. Fish tickets should be hand delivered to the Department of Fish and Game, Commercial Fisheries Management and Development in Unalakleet, Alaska to a representative of the department before leaving the fishing District.

Floating processing vessels or tenders carrying spawn-on-kelp product from the fishery should first contact the department before leaving the fishing grounds.

LICENSE REQUIREMENTS

In addition to the Alaska Department of Fish and Game permits required to operate a pound, operators must also have a limited entry or interim use permit (G02Z or G34Z) from the Commercial Fisheries Entry Commission. Individuals who do not have pound permits but are assisting in the operation of the fishery in any manner must have a crew member license. All commercial vessels (including skiffs) used in the fishery are required to be licensed with the Limited Entry Commission. Fishermen are required to display the permanent vessel license plate (ADF&G number) on both sides of the hull, cabin, or mast in permanent symbols at least 12 inches

high and with lines at least 1-inch wide that contrast with the background.

Applications for vessel and fishing permits are available from all offices of the Alaska Department of Fish and Game or can be obtained by writing the Commercial Fisheries Entry Commission, 8800-109 Glacier Highway, Juneau, Alaska 99801-8079. Crew member licenses may be obtained from local vendors in most communities.

OTHER AGENCY REQUIREMENTS

Prospective pound operators are advised to consider other agency requirements for constructing and operating pounds in Norton Sound. All pound operators are urged to contact the Alaska Department of Natural Resources, the National Marine Fisheries Service, and the United States Coast Guard to determine other regulations and requirements.

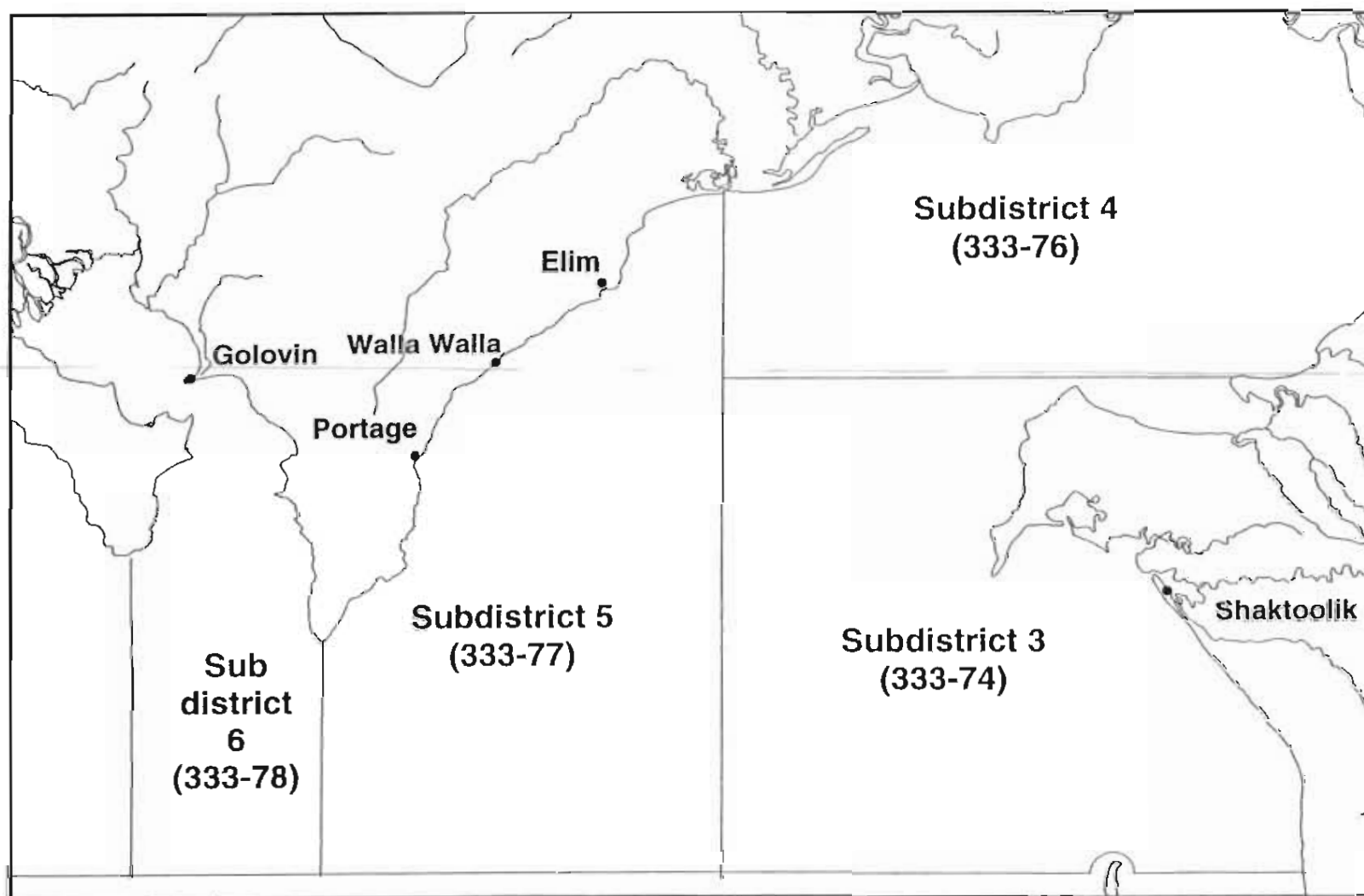


Figure 1. Subdistrict 5, the Spawn-on-Kelp fishery subdistrict boundary.

LIST OF MANAGEMENT CONTACTS

Following are Commercial Fisheries Division contacts regarding this management plan:

Tom Kron Region III Supervisor	333 Raspberry Road Anchorage, Alaska 99518-1599 (907) 267-2166
Rich Cannon Region I Management Biologist	333 Raspberry Road Anchorage, Alaska 99518-1599 (907) 267-2115
Charles Lean Area Management Biologist	Pouch 1148 Nome, Alaska 99762 (907) 443-5167
Helen Hamner Assistant Regional Biometrician	333 Raspberry Road Anchorage, Alaska 99518-1599 (907) 267-2120
Fred Bue Assistant Management Biologist	Pouch 1148 Nome, Alaska 99762 (907) 443-5167
Tom Kohler Assistant Management Biologist	P.O. Box 689 Kotzebue, Alaska 99752-0689 (907) 442-3852
Unalakleet Seasonal Office Area Management Staff open after May 11	P.O. Box 243 Unalakleet, Alaska 99684 (907) 624-3921